

IN THE CLAIMS

Please cancel claims 1-31 without prejudice.

1-31. Canceled.

32. (original) A packaged diode comprising:

a substrate;

an impurity implanted in the substrate;

an insulating layer over the substrate;

an anode and a cathode on the insulating layer;

a first conductive layer over the anode, the first conductive layer in contact with the impurity;

a second conductive layer over the cathode, the second conductive layer in contact with the substrate.

33. (original) The packaged diode of claim 32, wherein the substrate of an N-type substrate, and the impurity is a P-type impurity.

34. (original) The packaged diode of claim 32, wherein the substrate of a P-type substrate, and the impurity of an N-type impurity.

35. (original) The packaged diode of claim 33, wherein the anode and the cathode are posts.

36. (original) The packaged diode of claim 35, wherein the posts are made of one of the materials selected from: silicon, gallium arsenide, silicon germanium, silicon carbide, gallium phosphide, ceramic materials, sapphire quartz, polymer plastic, patterned plastic, epoxy, glass, Teflon, silicon dioxide, or polysilicon.

37. (original) The packaged diode of claim 32, wherein the first and second conductive layers are gold.

38. (original) The packaged diode of claim 37, further comprising a connective layer over the first and second conductive layers, the connecting layer comprising:

a nickel layer; and

a flash gold layer.

39. (original) The packaged diode of claim 32, further comprising a final passivation layer, the final passivation layer covering the first conductive layer and the second conductive layer, the substrate, and the cathode and the anode, the final passivation layer leaving exposed on the first conductive layer on top of the anode and the second conductive layer on top of the cathode.

40. (original) The packaged diode of claim 39, wherein the final passivation layer is polyimide.